UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUL 15 1992

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: AHERA Policy Clarification on Vinyl Asbestos Tile (VAT) Removal

FROM: John J. Neylan III, Director
Policy and Grants Division
Office of Compliance Monitoring (EN-342)

TO: ADDRESSEES

Enclosed are copies of the final policy clarification on VAT removal under AHERA. As you know, this clarification is a product of the AHERA Interpretive Guidance Workgroup which is chaired by the Office of Compliance Monitoring and made up of representatives from the Office of General Counsel, Office of Enforcement, Office of Pollution Prevention and Toxics, Region I, and the Office of Air Quality Planning and Standards. It has also received the review and concurrence of the Regional offices and OPPT.

Thank you to all who participated in the development of this clarification through your review and comment. Special recognition for many hours of hard work is due to the members of the VAT Removal Subgroup: Mary Jane Angelo, OGC; Tom Ripp, OAQPS; Bob Jordan, EAD; Sally Sasnett, OCM; and especially to the Subgroup Chair, Betsy Dutrow, of the Exposure Evaluation Division (OPPT); and to Jim Bryson, Region I for coordinating Regional responses.

We have enclosed 50 copies for use by each Region and plan to make copies of this document available for distribution through the TSCA Hotline. We are in the process of getting additional copies printed. Please let us know if additional copies are needed for your Region.

Again thank you for your continuing assistance with the AHERA Interpretive Guidance process. If you have any questions please contact Sally Sasnett, Workgroup Chair, or Jim Bryson, Regional Coordinator.

Enclosure

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Prevention, Pesticides and Toxic Substances
AHERA Interpretive Guidance Workgroup
Office of Compliance Monitoring
July 1992

POLICY CLARIFICATION FOR THE ASBESTOS HAZARD EMERGENCY RESPONSE ACT (AHERA)

ISSUE: Under what circumstances is removal of Vinyl Asbestos Tile (VAT) or similar materials a response action under AHERA?

BACKGROUND:

AHERA section 202, Definitions, states that a response action " ... means methods that protect human health and the environment from asbestos-containing material."

The AHERA schools regulation definition of response action (40 CFR 763.83) states: "Response action means a method, including removal, encapsulation, enclosure, repair, operations and maintenance, that protects human health and the environment from friable ACBM."

In defining "friable", the AHERA schools rule states: "'Friable' when referring to material in a school building means that the material, when dry, may be crumbled, pulverized, or reduced to powder by hand pressure, and includes previous nonfriable material after such previously nonfriable material becomes damaged to the extent that when dry it may be crumbled, pulverized, or reduced to powder by hand pressure."

The response to Question 42 of the "100 Commonly Asked Questions About the AHERA Asbestos-In-Schools Rule" (May 1988) also relates to the issue. It states:

> "If the floor tile or its adhesive material does not become friable during the removal process, it is not a response action, since the definition of response action refers to a method "that protects human health and the environment from friable ACBM." If the material becomes friable during removal, however, the job is then a response action ..."

Implicit in this answer is the assumption that if the material is already friable, the activity must be conducted as a response action.

This paper seeks to clarify that certain VAT removal activities must be conducted as response actions under AHERA and that the determination of whether a particular removal activity is, or is not, a response action, needs to occur prior to initiation of the activity in order that all necessary requirements and precautions are met.

DISCUSSION:

Vinyl asbestos tile (or sheet flooring) in good condition would generally be considered nonfriable. However, it is recognized that when nonfriable ACM is subjected to certain forces, such as mechanical forces, weather, or aging, it can be weakened to the point where it can become friable (i.e., crumbled, pulverized, or reduced to powder by hand pressure) and can thereby release asbestos fibers. EPA discussed this situation in the preamble to the November 20, 1990 Asbestos NESHAP Revision and acknowledged it in the definition of "Regulated Asbestos-Containing Material". ("'Regulated Asbestos-Containing Material' is (a) friable asbestos material, (b) Category I nonfriable ACM that has become friable, (c) Category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting or abrading, or (d) Category II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations."[1]

The AHERA schools rule also recognized the potential for nonfriable material to become friable in both its definition of friability and in 40 CFR 763.91(a): "Any material identified as nonfriable ACBM or nonfriable assumed ACBM must be treated as friable ACBM for purposes of this section when the material is about to become friable as a result of activities performed in the school building."

The use of certain mechanical techniques on VAT or asbestos-containing sheet flooring (and the mastic used to hold it in place), such as sanding, grinding, chipping, drilling, cutting,[2] and abrading, create a high probability that ACM will be damaged or weakened to such an extent that it would be rendered friable. Based on the AHERA regulation's definition of response action as "a method that protects human health and the environment from friable ACBM", and the expectation that the material will be rendered friable by the activity, if any of these methods are employed to remove VAT from an AHERA-regulated school building, the activity would be considered to be a response action (unless it is a small-scale-short-duration project). In addition, the asbestos NESHAP requirements, including notification, may apply to the activity.

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[1] Category I nonfriable ACM is any asbestos-containing packing, resilient floor covering (and mastic), or asphalt roofing product which contains more than 1 percent asbestos as determined using polarized light microscopy (PLM). Category II nonfriable ACM is any material, excluding Category I nonfriable ACM, containing more than 1 percent asbestos as determined using PLM, that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure. (40 CFR Part 61 Subpart M, Sec. 61.141)

[2] In this context, "cutting" does not include shearing, slicing, or punching.

However, at this time, it appears that certain other removal techniques which do not use grinding, mechanical chipping, abrading, cutting, sanding, or drilling the material would not be expected to render the material friable. (Examples of such techniques include those which use solvents, water, or heat – such as infra-red, or other similar techniques, which cause the tiles to become loosened or pliant to the point where they are easily removed.) These activities would not be considered to be response actions, as long as the material is not already friable, or in such poor condition that it is likely to become friable during the activity, or as a consequence of the activity.

In summary, in deciding whether or not to conduct a removal activity (other than small-scale-short-duration) as a response action (including use of a project design, accredited persons, and air clearance), both of the following factors must be considered.

1) Condition of the material. If the material is in such poor condition that it is already friable, or that it is likely to become friable during, or as a consequence of the activity, the removal must be conducted as a response action, because of the high probability of fiber release from the friable material.

2) The methods which will be used to remove the material, (including the mastic). If the removal methods involve sanding, grinding, drilling, mechanical chipping, cutting[3], or abrading the material, or any other technique that is likely to result in rendering the material friable, the removal must be conducted as a response action.

In addition to fulfilling AHERA requirements, consideration of these factors is consistent with the requirements of the Asbestos NESHAP.

DETERMINATION:

Removal of VAT (or other known or assumed ACM flooring or its adhesive) which involves sanding, grinding, mechanical chipping, drilling, cutting[4], or abrading the material has a high probability of rendering the material friable and capable of releasing asbestos fibers. Therefore, removal projects which employ any of these techniques (other than small-scale-short-duration) must be conducted as response actions, including use of a project design, accredited persons, and air clearance.

In addition, any removal project should receive careful planning prior to initiation in order to determine whether it needs to be conducted as a response action. While this paper is directed primarily at clarifying which removal activities must be conducted as response actions, removal techniques for small-scale-short-duration projects should also be evaluated prior to intitiation to ensure that they, too, are conducted safely.

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[3] See footnote #2.

[4] See footnote #2.

No matter what the removal technique or scope of the project, consideration should be given to worker and building occupant protection (including OSHA and EPA Worker Protection requirements and state regulations), proper disposal of removed material, and final cleaning of the work area. Thought should also be given to the potential for releases of VOCs (volatile organic compounds) from solvents; fire hazards; and possible hazardous waste considerations from the use of solvents such as toluene and xylene to remove mastic. In addition, NESHAP requirements apply to any project, or group of projects at a facility, planned or anticipated within a calendar year which will reach the NESHAP threshold (160 square or 260 linear feet).

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